

EXHIBIT A

TRAFFIC IMPACT ANALYSIS DOWE FLATS PROJECT

Prepared for:

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May, 1993
FHU Reference No. 93-051

I. INTRODUCTION

Southdown, Inc. (Southwestern Portland Cement) currently operates the cement plant located east of Lyons in Boulder County (see Figure 1). The plant is presently supplied with rock material which is being hauled by truck either from pits located south of the plant across Hygiene Road or from a Larimer County quarry, requiring a haul of approximately 11 miles on county roads and on SH 66.

To ensure a sufficient future supply of rock to allow the plant to maintain its current production level, Southdown proposes to open the Dowe Flats area for mining. It is proposed to produce about 760,000 tons of rock per year in this area. The rock would be hauled from the mine site to the cement plant by truck, requiring trucks to travel on or across Highway 66. When the new area reaches full capacity production, operations at the Larimer County quarry will cease, thereby eliminating the long distance haul on public roadways.

The purpose of this report is to estimate the traffic to be generated by rock hauling from the mine to the cement plant, to evaluate several alternative routes for the haul traffic, to identify the impacts associated with the haul trucks, and to recommend measures to mitigate these impacts.

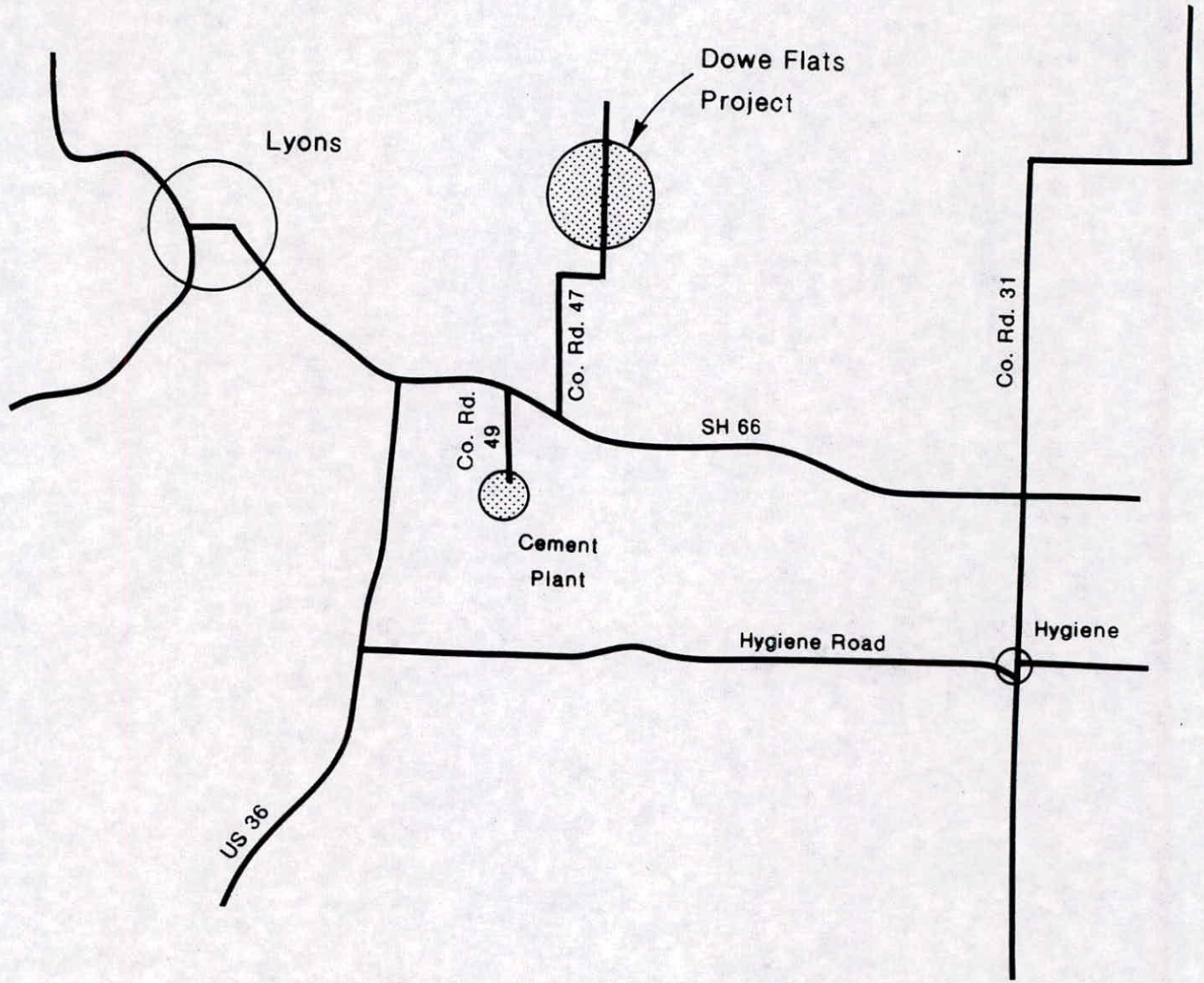


Figure 1
Vicinity Map

II. EXISTING CONDITIONS

A. ROADWAYS

As illustrated by Figure 1, there are three key roadways in the vicinity of the project:

State Highway 66 - This road provides access through the area in an east/west direction, running from Longmont to Lyons. The road is a two-lane highway with wide paved shoulders. In the vicinity of the project, the posted speed limit is 55 MPH. This road not only serves commuter traffic between communities, but it also carries significant recreational traffic during the tourist season.

County Road 47 - CR 47 is a narrow, gravel road running north from SH 66. It currently runs through the area proposed for mining. The road provides access to the Indian Mountain area and to the Rabbit Mountain open space area. It has a posted speed limit of 25 MPH.

CR 47 intersects with SH 66 at a "T" intersection, with STOP sign control on CR 47. There are no turn lanes in any direction provided at this intersection.

County Road 49 - This is a concrete paved roadway providing access from SH 66 to the entrance to the cement plant. The road crosses the Burlington Northern Railroad tracks at an at-grade crossing and then has a bridge over the St. Vrain River. When the road reaches the entrance to the plant, it turns to the west at a 90-degree angle and continues as an unpaved road.

CR 49 intersects SH 66 at a point about 1,300 feet west of the CR 47 intersection. It too is a STOP sign controlled "T" intersection. However, this intersection has been improved with a westbound left turn lane and eastbound right turn acceleration and deceleration lanes.

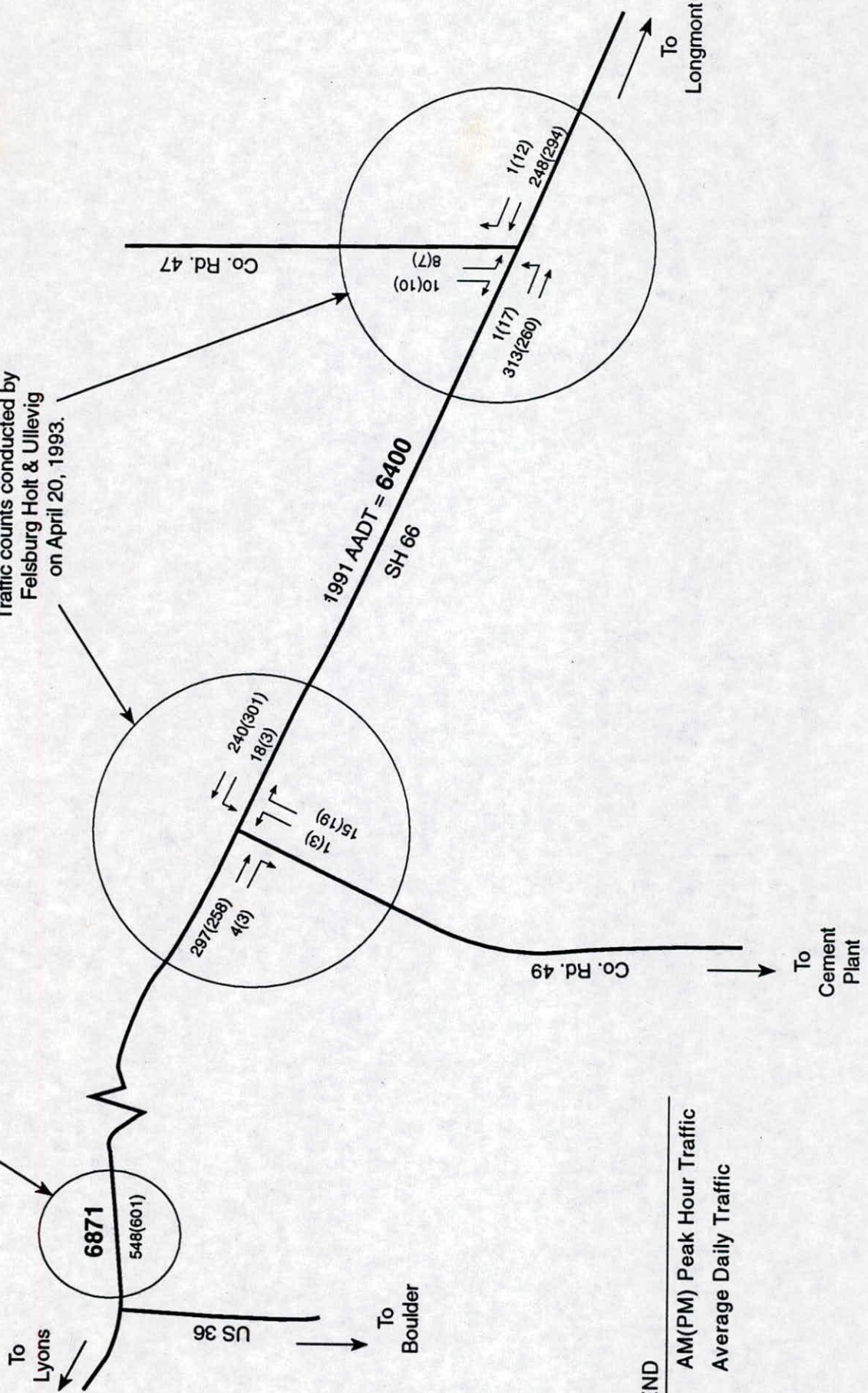
B. EXISTING TRAFFIC CONDITIONS

Figure 2 depicts both daily and peak hour traffic data for the roadways in the vicinity of the project. The daily data obtained from the Colorado Department of Transportation (CDOT) indicates that the annual average daily traffic (AADT) volume on SH 66 is about 6,400 vehicles per day (vpd). Historical data since 1982 reveal that traffic on SH 66 has increased at a rate of approximately 2 percent per year.

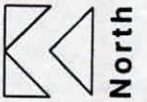
F E L S B U R G
H O L T &
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Traffic count conducted by
Colorado Department of
Transportation in
September, 1991.

Traffic counts conducted by
Felsburg Holt & Ullevig
on April 20, 1993.



LEGEND
xx(xx) AM(PM) Peak Hour Traffic
XXX Average Daily Traffic



North

Figure 2
Existing Traffic Volumes

It should be noted that this volume represents an average condition throughout the year. Because this road provides access to the mountains, tourist traffic increases the volumes during the tourist season. Based on data provided by CDOT for SH 66 and other similar roadways, the following estimate of the monthly variation of average traffic volumes has been determined for SH 66:

<u>Month</u>	<u>As % of Average Month</u>
January	0.90
February	0.89
March	0.91
April	0.94
May	1.00
June	1.09
July	1.18
August	1.18
September	1.08
October	0.97
November	0.92
December	0.92

Thus, it can be seen that July and August are the months of heaviest travel, with daily volumes 18 percent greater than average conditions.

The peak hour turning movement counts illustrated on Figure 2 were recorded by Felsburg Holt & Ullevig in April 1993. The peak hours were found to be 7:15 - 8:15 AM and 4:45 - 5:45 PM. The counts revealed that the volumes on SH 66 are very similar in each of the peak hours at slightly less than 600 vehicles per hour (vph). The data also highlight the low traffic volumes on each of the county roads.

These volumes were used to determine existing levels of service on SH 66 and at the two county road intersections utilizing techniques published in the Highway Capacity Manual (see Appendix A for worksheets). Level of service (LOS) is a measure of the quality of traffic operations, ranging from LOS A (free flow) to LOS F (severe congestion). More detailed definitions of the levels of service are also provided in Appendix A. The two-way LOS on SH 66 is calculated to be LOS B for each peak hour. The levels of service at unsignalized intersections is measured for each critical movement at the intersection. Table 1 summarizes the results of these analyses. These results indicate that all movements at these intersections operate at good levels of service.

**TABLE 1
SUMMARY OF INTERSECTION LOS ANALYSES - EXISTING TRAFFIC VOLUMES**

Intersection	Movement	LOS (AM/PM)
CR 47/SH 66	SB Left	B/C
	SB Right	A/A
	EB Left	A/A
CR 49/SH 66	NB Left	B/B
	NB Right	A/A
	WB Left	A/A

Table 2 summarizes the accident history of SH 66 between the US 36 intersection and the Hygiene intersection (CR 31), as available from CDOT's annual report. These data are for the most recent five years for which data are available from CDOT. The data reveal that there have been 51 accidents on this 3.9 mile stretch of road over these five years; there have been two fatal accidents. Most importantly, with the exception of 1990, the total accident rate on this section of roadway has been less than the average rate experienced statewide on rural state highways of a similar nature.

**TABLE 2
ACCIDENT HISTORY - SH 66**

Year	Number of Accidents				Total Accident Rate (1)	Total Rural State Primary Highway Average Accident Rate
	Property Damage	Injury	Fatal	Total		
1991	4	3	0	7	0.77	1.20
1990	10	6	0	16	2.25	1.17
1989	3	4	0	7	0.77	1.18
1988	3	7	1	11	1.29	1.35
1987	6	3	1	10	1.10	1.42

(1) Accidents per million vehicle-miles of travel.

III. PROJECT GENERATED TRAFFIC

A. ROCK HAUL TRAFFIC

The amount of truck traffic generated by rock hauling activity is dependent on production quantities, size of the vehicles, and hours of hauling. Table 3 summarizes the projections for this activity. In producing these estimates the following assumptions were used:

- o The total annual rock production will be 760,000 tons.
- o The monthly production estimates were prepared by the applicant on the basis of historical trends.
- o Hauling would occur only four days per week. No hauling would occur on weekends.
- o Hauling would occur during 8.5 hours per day.

As shown on the table, estimates were made for the use of two alternative rock haul vehicle types. The first estimates assumed the use of standard highway vehicles with a payload capacity of 25-tons. The second set of estimates assumed use of a vehicle capable of hauling 85 tons of rock. The applicant wishes to pursue the possibility of using the larger vehicles because they are more efficient and would result in fewer than one-third the number of truck trips impacting the roadways. Such 85-ton trucks are currently hauling rock across Hygiene Road from the south to the plant.

The results shown in Table 3 indicate that during peak production months, the total number of truck trips (empty plus loaded) would be 45 per hour if the 25-ton vehicles were used or a maximum of 14 per hour if the 85-ton vehicles were used.

B. OTHER PROJECT TRAFFIC

Because this proposal does not represent an increase in the production capacity of the plant, other types of traffic will not be significantly affected by the proposal. Activity from vendors supplying material to the plant and customers hauling cement from the plant will remain essentially the same.

The crew operating the new mine site is expected to consist of approximately 10 employees. They will stage at a site at the south end of the mine area and will utilize County Road 47 to access the site. Therefore, one could estimate a worst case of 10 additional vehicle trips on CR 47 during each peak hour attributed to employee traffic. It should be noted that these employees will be shifted from other locations at the plant and will, therefore, represent a reduction in traffic elsewhere.

The one significant change which would be experienced is the elimination of the trucks which currently make the 11-mile haul trip from the Larimer County quarry along SH 66 and county roads. This traffic currently amounts to 12,000 truck trips per year (6,000 loaded, 6,000 empty). This equates to 132,000 vehicle-miles of truck travel per year, of which about 36,000 vehicle-miles is on the state highway.

**TABLE 3
HAULING ACTIVITY PROJECTIONS - DOWE FLATS**

Month	Monthly Production (1) (Tons of Material)	Typical Daily Production (2)	25-Ton Trucks			85-Ton Trucks		
			Truck Loads Per Day	Truck Trips Per Day (3)	Truck Trips Per Hour (4)	Truck Loads Per Day	Truck Trips Per Day (3)	Truck Trips Per Hour (4)
January	64,000	4,000	160	320	38	47	94	11
February	49,500	3,095	124	248	30	36	72	9
March	46,700	2,920	117	234	28	34	68	8
April	64,890	4,055	162	324	39	48	96	12
May	62,850	3,930	157	314	37	46	92	11
June	64,920	4,060	162	324	39	48	96	12
July	69,110	4,320	173	346	41	51	102	12
August	64,930	4,060	162	324	39	48	96	12
September	75,110	4,695	188	376	45	55	110	13
October	54,930	3,435	137	274	33	40	80	10
November	67,220	4,200	168	336	40	49	98	12
December	75,840	4,740	190	380	45	56	112	14
	760,000							

(1) Based on information provided by the applicant.

(2) Assumes 4 weeks per month and hauling on 4 days per week. It should be noted that these assumptions will result in estimates that are somewhat high for the typical day.

(3) Each truck load of material generates two truck-trips, one loaded and one empty.

(4) Assumes hauling 8.5 hours per day.

IV. ALTERNATIVE HAUL ROUTES

Throughout the planning process, a number of alternative routes for the haul trucks to travel between the mine site and the cement plant have been considered. These evolved through a logical sequence and are schematically illustrated on Figure 3. Each of the alternatives is discussed below.

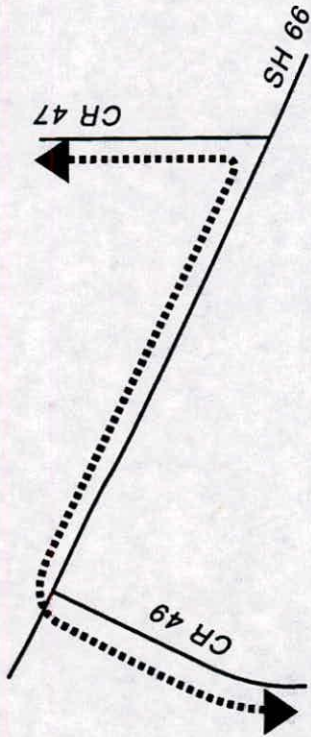
It should be noted that inherent to each of these alternatives is the relocation of the portion of CR 47 which runs through the proposed mine area. This section of the road will be relocated to the west and will be constructed to county standards in an environmentally sensitive manner. This relocation does not effect the section between the mine site and SH 66; nor does it relocate the intersection with SH 66.

Alternative 1 - Use of Existing Roads

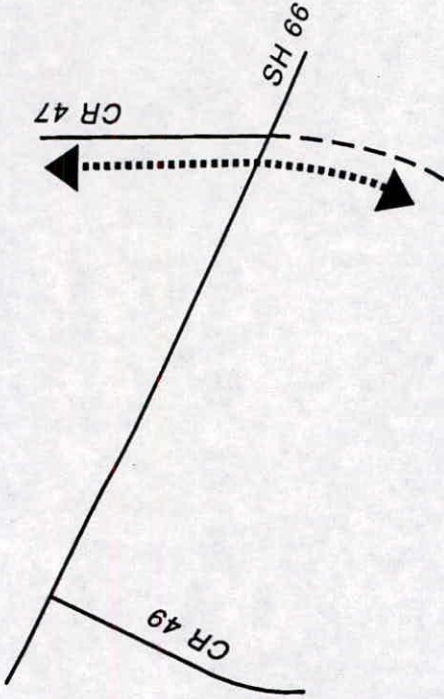
The most simple alternative to implement, and the first considered, was the use of existing CR 47, SH 66, and CR 49 for the haul route. This would require improvement of CR 47 from SH 66 to the mine entrance and would require turn lane additions at the intersection of CR 47/SH 66. Furthermore, the required length of acceleration/deceleration lanes (to be consistent with the State Highway Access Code) would essentially result in widening SH 66 for the entire length between CR 47 and CR 49.

While these improvements could be reasonably implemented, several very significant difficulties with this alternative were recognized after preliminary analysis. First, this alternative mixed the heavy haul truck traffic with residential and recreational traffic on CR 47 and also routed the heavy trucks near several residences along CR 47.

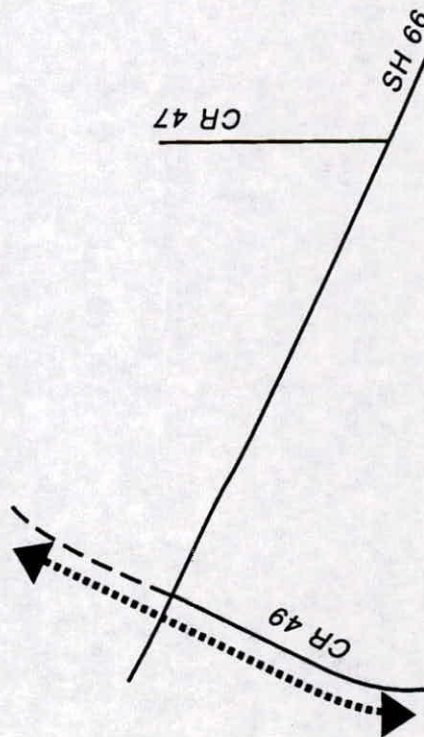
The second primary concern was related to traffic operations along SH 66. This routing would require that a truck turn right from CR 47, accelerate and merge with traffic on SH 66, and then move into a left turn lane for deceleration to CR 49 (this type of movement is often referred to as a "Z" movement). The difficulty with this movement in this situation is that these two intersections are spaced only 1,300 feet apart. Therefore, trucks would be unable to reach highway speeds by the time they would have to merge with highway traffic in order to move into the left turn lane. Based on the acceleration capabilities of such heavy trucks, it is estimated that they could only reach a speed of about 30 MPH in the available distance. With a speed limit of 55 MPH on SH 66, this speed differential could be a significant safety hazard. Therefore, this alternative was not considered desirable.



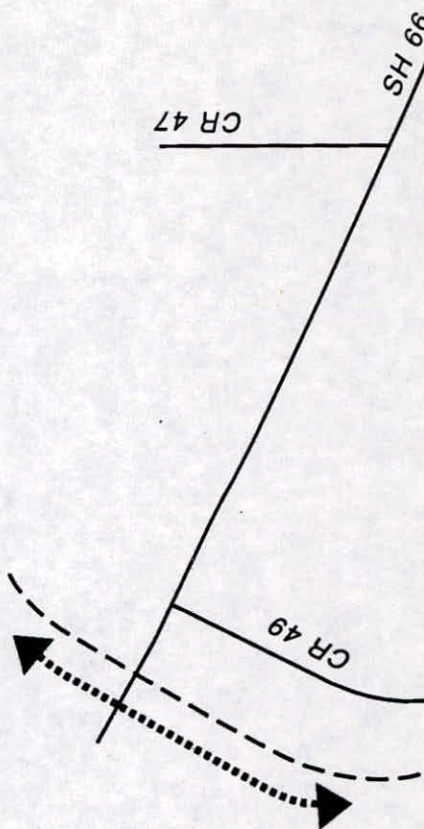
Alternative 1 - Use of Existing Roads



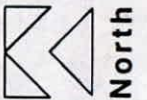
Alternative 2 - Highway Crossing at CR 47



Alternative 3 - Highway Crossing at CR 49



Alternative 4 - Western Highway Crossing



North

Figure 3
Haul Route Alternatives

Alternative 2 - Highway Crossing at CR 47

The next logical alternative considered was a direct crossing of SH 66 at the CR 47 intersection. This alternative would entail the construction of a new haul road from SH 66 to the cement plant, including a railroad crossing and a bridge over the river. Physically, this presented some difficulties because of the elevation difference between SH 66 and the railroad in this area. This difference (approximately 8 - 9 feet) is not nearly sufficient to allow grade separation of the haul road and the railroad, yet it is too great to allow a design to provide an at-grade railroad crossing.

Alternative 3 - Highway Crossing at CR 49

The corollary to Alternative 2 would be to construct a new haul route from the mine site to the CR 49 intersection with SH 66 and to allow a direct crossing of the highway at this point. This option would remove the haul trucks from CR 47 and would utilize the existing crossings of the railroad tracks and the river on the south side of the highway. However, this would mix haul traffic with other traffic using CR 49.

The most difficult hurdle associated with this alternative is that the applicant does not own the properties through which this haul route would run. Therefore, while this may be a viable alternative in the long term future, it is not feasible at this time.

Alternative 4 - Western Highway Crossing

The applicant does own properties which would allow him to construct a separate haul route from the mine to the plant with a crossing of SH 66 approximately 500 - 550 feet west of the CR 49 intersection. This road would be limited to use by haul trucks only; employee, supplier, customer and other traffic would still use CR 47 and CR 49. Thus, one advantage that this alternative offers is that the haul trucks would not mix with other traffic on any of these roadways.

The haul route would cross SH 66 at a location where sight distance is good and the road is only two lanes wide (no turn lanes) and, thus, shorter to cross. Furthermore, the elevations of the highway and of the railroad in this area are such that at-grade crossings of both could be achieved. However, at the north end of the haul route near the mine entrance, it is proposed to grade separate the haul route and the relocated CR 47.

Because of these characteristics, Alternative 4 is the preferred haul route.

V. TRAFFIC IMPACTS

A. METHODOLOGY

In this section, both the immediate impacts and the long-term impacts of the traffic associated with the proposal are assessed. The immediate impacts are based on full production activity and existing background traffic levels on the highways. All analyses assess conditions for the peak summer season (the month of July is used for analysis purposes) because this represents the time when rock hauling and background traffic are both at high levels.

The long-term impacts are assessed on projected traffic volumes twenty years into the future. To estimate these volumes, existing traffic volumes on SH 66 were increased by a factor of 1.4. This determination was made through several approaches. Primarily, the Colorado Department of Transportation uses this 20-year growth factor for SH 66 in their planning process. It is further substantiated by the historical trend which has shown a two percent annual growth for the past ten years. Discussions with Boulder County Public Works Department staff have also indicated that this is a reasonable estimate.

The primary focus of the impact analysis is on the highway crossing of the haul trucks. To assess the operation at the crossing, two different techniques were used. The first of these was the standard unsignalized intersection capacity analysis technique published in the Highway Capacity Manual, Special Report 209, Transportation Research Board, 1985 which calculates a level of service for, in this case, the crossing movement. The second approach was also based on an analysis of available gaps in SH 66 traffic to allow these trucks to cross the highway, utilizing a methodology published in "The Potential Capacity of Unsignalized Intersections", Karsten Baass, ITE Journal, October 1987. While both techniques are based on gap availability, the two methods treat trucks differently. The first approach converts trucks to passenger car equivalencies and then determines the level of service on this basis. The second approach allows one to actually estimate the required gap for a particular vehicle and then determine the number of available gaps of at least that length. We believe that the latter approach is more reflective of the actual conditions, although this method does not offer a clear correlation to a LOS definition.

For this analysis, the acceleration capabilities of both 25-ton and 85-ton trucks were field tested. The length of time necessary for a vehicle (both loaded and empty) to clear a length of 100 feet from a stop condition was measured. Although 100 feet is longer than the distance to be cleared at the proposed crossing, use of this distance results in a conservatively high estimate of the required gap. Because of the relative acceleration capabilities of the two vehicles and because the 85-ton trucks are only about half the length of the 25-ton trucks, the time to clear this distance for both types of vehicles was very similar, averaging about 12 seconds for loaded conditions. Although the time was less when the trucks were empty, the 12-second gap requirement was used for both directions of travel in the analysis. Thus, once again a conservative factor was built into the approach.

Although the increase in traffic on SH 66 and at the intersections with the county roads due to the proposal will not be substantial (as noted earlier), levels of service for the two-way operation of SH 66 and the unsignalized intersections were also determined for the projected traffic volumes using the techniques published in the Highway Capacity Manual.

B. IMMEDIATE IMPACTS

The traffic volumes used for this assessment are illustrated on Figure 4. These volumes represent the existing volumes illustrated on Figure 2 adjusted to reflect the peak season (July). The peak hour turning movement counts conducted in April were increased by approximately 20 percent to account for this seasonality. The worksheets of the level of service analyses are included in Appendix B.

Haul Route/Highway Crossing

The unsignalized intersection analysis revealed a LOS C for the crossing movement in both the AM peak hour and the PM peak hour. The more detailed gap analysis yielded the following results:

<u>Period</u>	<u>Gap Available</u>
AM Peak Hour	102
PM Peak Hour	96

With a maximum peak hour demand of 45 movements for the 25-ton trucks and 14 movements if the 85-ton trucks are used, there are more than adequate gaps available.

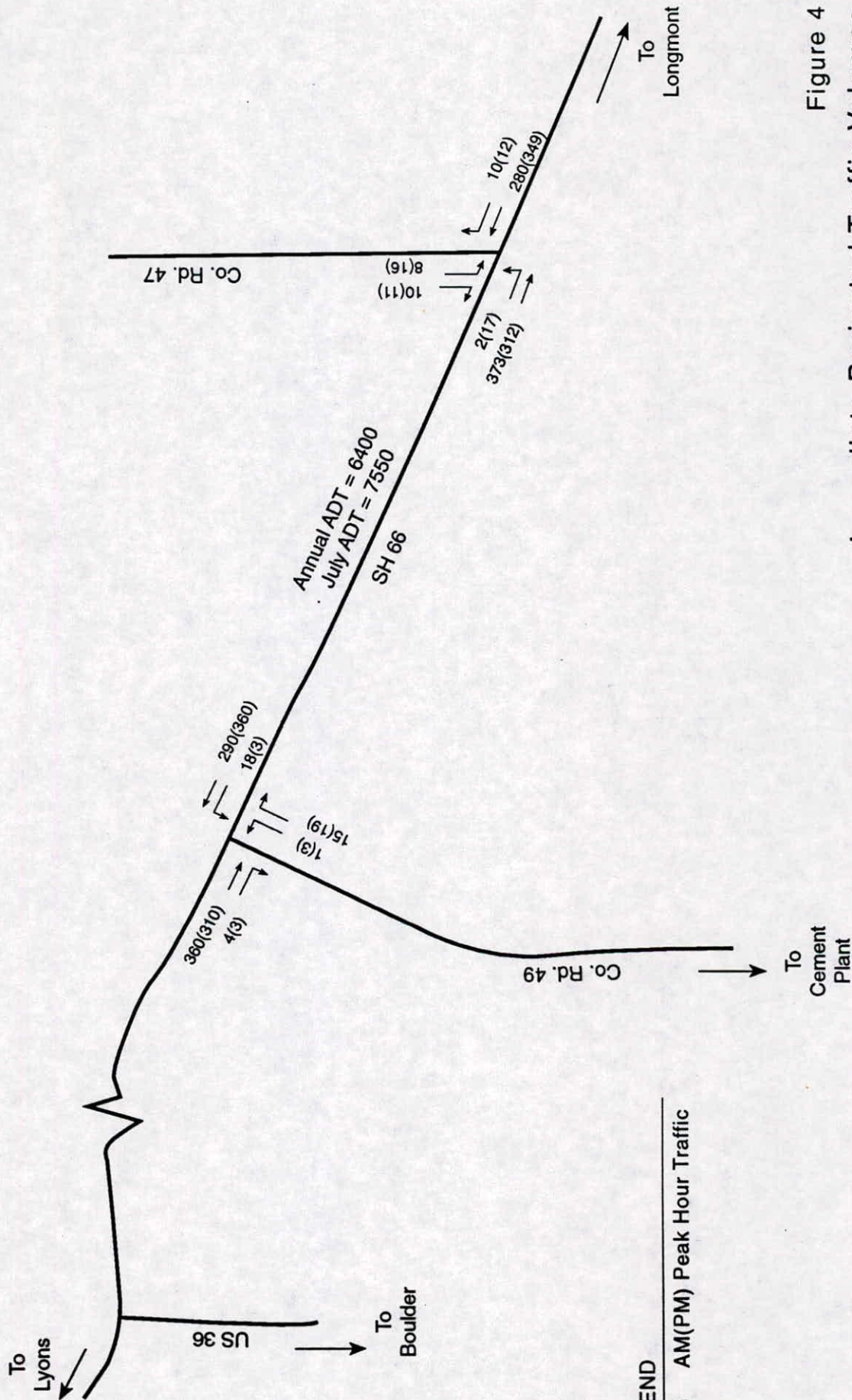
SH 66

The two-lane level of service analysis indicates no change in the operations on SH 66, with LOS B projected for both peak hours.

County Road Intersections

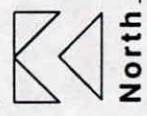
Table 4 summarizes the results of the level of service determinations at the two county road intersections. Because of the higher levels of traffic on SH 66, left turn movements out of the intersections will experience slightly longer delays during the peak season, but these are all still very acceptable levels of service.

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LEGEND
xx(xx) AM(PM) Peak Hour Traffic

Figure 4
Immediate Projected Traffic Volumes
(Peak Season Estimates)



**TABLE 4
SUMMARY OF INTERSECTION LOS ANALYSES
IMMEDIATE PROJECTED VOLUMES - PEAK SEASON**

Intersection	Movement	LOS (AM/PM)
CR 47/SH 66	SB Left SB Right EB Left	C/C A/A A/A
CR 49/SH 66	NB Left NB Right WB Left	C/C A/A A/A

C. LONG TERM (20 YEAR) IMPACTS

Figure 5 illustrates the traffic volumes projected for twenty years into the future. These too represent the peak summer season and were determined by factoring current volumes by a factor of 1.4. The results of the analyses are summarized below and the LOS worksheets are included in Appendix C.

Haul Route/Highway Crossing

Utilizing the unsignalized intersection technique, LOS D is calculated for both the AM and the PM peak hour. The gap analysis approach yielded the following results:

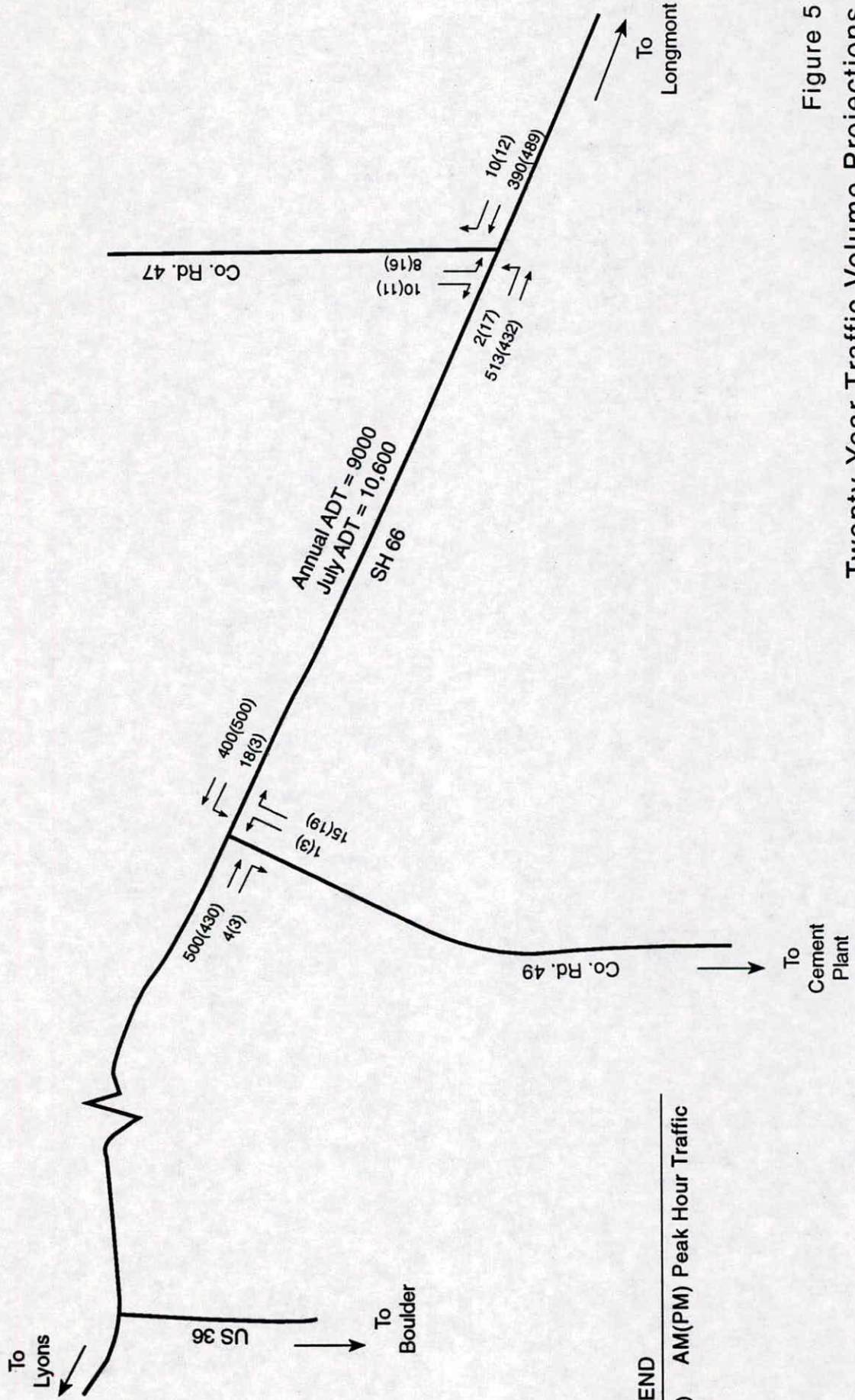
<u>Period</u>	<u>Gap Available</u>
AM Peak Hour	51
PM Peak Hour	46

These results indicate that in the long range future, the number of sufficient gaps available will still be adequate, but nearly all of the gaps will be utilized to accommodate the crossing maneuver if 25-ton trucks are used. If the larger trucks are used, more than adequate gaps would be available.

SH 66

Even with the increased traffic volumes projected on SH 66 in this time frame, the two-lane LOS analysis indicates a LOS C for both peak periods. Thus, widening of the roadway to four lanes is not projected to be necessary.

F E L S B U R G
H O L T &
U L L E V I G



LEGEND
xx(xx) AM(PM) Peak Hour Traffic

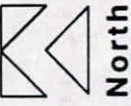


Figure 5
Twenty-Year Traffic Volume Projections
(Peak Season)

County Road Intersections

The intersection level of service analyses for the twenty-year projections are summarized in Table 5. These results indicate that these intersections would still operate at acceptable levels of service as unsignalized intersections.

**TABLE 5
SUMMARY OF INTERSECTION LOS ANALYSES
20-YEAR PROJECTED VOLUMES - PEAK SEASON**

Intersection	Movement	LOS (AM/PM)
CR 47/SH 66	SB Left SB Right EB Left	D/D A/A A/A
CR 49/SH 66	NB Left NB Right WB Left	D/D A/A A/A

VI. SUMMARY OF FINDINGS AND RECOMMENDATIONS

The following points represent a summary of the findings of the analyses which have been conducted and recommendations to help mitigate the traffic impacts of the proposal:

- o The primary increased traffic associated with the proposal would be traffic related to the rock hauling activity. Because this proposal only replaces the rock supply and does not increase the capacity of the plant, traffic related to other material suppliers and product customers will not change. Employee traffic to the mine site will consist of only about ten employees and these employees will only be shifted from other locations at the project.
- o Opening of the Dowe Flats area will eliminate 12,000 truck trips per year which currently haul rock for 11 miles on county roads and SH 66 from a quarry in Larimer County. This equates to 132,000 vehicle-miles of truck travel per year.
- o If 25-ton trucks are used to haul rock from the Dowe Flats mine to the current plant, the annual average number of truck trips (total of loaded and empty) per hour would be approximately 38 vph . During the peak season, this number could be as high as 45 vph.
- o If 85-ton trucks are used for the haul operation, the annual average truck trips per hour would be about 11 vph. During the peak season, this estimate could reach 14 vph.
- o It is recommended that a separate haul route be constructed from the mine site to the current plant on the proposed "western" alignment. This would allow separation of the haul trucks from other traffic using CR 47 or CR 49. Furthermore, this would allow a crossing of SH 66 at a point where it is only two lanes wide. This route location could be constructed on land owned by the applicant.
- o The analyses indicate that even during the peak season there will be sufficient gaps in traffic to allow trucks to cross the highway at-grade.
- o This crossing would not meet signal warrants according to the Manual on Uniform Traffic Control Devices within the time frame of this analysis.
- o Because the crossing would represent a somewhat unique situation, consideration should be given to the following measures to enhance its operations and safety:
 - The haul route should be restricted to haul trucks only. This could be done with signage and could be more effectively controlled with gates that could be activated by the truck drivers.
 - Advance warning signs with flashing beacons should be installed on SH 66 to advise motorists of side road truck traffic.

- Illumination of the crossing should be considered. Although rock would not be hauled during hours of darkness during the peak season, darkness comes in late afternoon during the winter months.
- o The twenty-year projections indicate that the number of crossing maneuvers and the number of available gaps in SH 66 traffic will be nearly equal. If this becomes reality and traffic continues to grow beyond this point, it may be necessary to consider the following methods of overcoming a capacity problem:
 - Limitation of hauling hours to avoid the peak hours of traffic on SH 66.
 - Signalization of the crossing.

LEVEL OF SERVICE QUALITATIVE DESCRIPTIONS

A. UNSIGNALIZED INTERSECTION LEVEL OF SERVICE

Unsignalized intersections base the level of service on the amount of delay experienced by vehicles turning out of or into the minor, stop sign-controlled street. There are no agreed upon quantitative measure of levels of service for unsignalized intersections, but some brief qualitative measures are given below:

LOS A - Little or no delay to vehicles. A very high level of service usually found only in rural areas or during off-peak hours.

LOS B - Short delays to vehicles. Still a very good level of service.

LOS C - Average delays to vehicles. Waiting time becomes noticeable. Freedom to enter major street traffic is slightly restricted.

LOS D - Long delays to vehicles. Due to heavy volumes on major street, vehicles on minor street are restricted in their ability to enter traffic stream.

LOS E - Very long delays to vehicles. Tolerable for short periods of time. If the level of service is present for long period, queue buildup on minor street becomes noticeable.

LOS F - Represents jammed conditions. Back-ups from locations down-stream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration; hence, volumes carried are not predictable.

B. TWO-LANE HIGHWAY LEVEL OF SERVICE

The concept of level of service (LOS) is defined as a measure quantifying the traffic operational conditions within a traffic stream. A LOS definition describes these conditions in terms of speed and freedom to maneuver for two-lane highways. There are six defined levels of LOS given letter designations ranging from A to F, with LOS A representing the best operating conditions and LOS F the worst. The 1985 Highway Capacity Manual defines the various levels of service as follows:

LOS A represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger or pedestrian is excellent.

LOS B is the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.

APPENDIX A

**LOS CALCULATIONS
EXISTING VOLUMES**

LOS C is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.

LOS D represents high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.

LOS E represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to "give way" to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.

LOS F is used to defined forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. LOS F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow which causes the queue to form, and LOS F is an appropriate designation for such points.

1985 HCM:TWO-LANE HIGHWAYS

FACILITY LOCATION.... S.H.66 (west of Co. Rd. 49)
 ANALYST..... L.LANG
 TIME OF ANALYSIS..... AM PEAK HOUR
 DATE OF ANALYSIS..... 05/17/93
 OTHER INFORMATION.... EXISTING TRAFFIC

A) ADJUSTMENT FACTORS

PERCENTAGE OF TRUCKS.....	1
PERCENTAGE OF BUSES.....	1
PERCENTAGE OF RECREATIONAL VEHICLES.....	1
DESIGN SPEED (MPH).....	60
PEAK HOUR FACTOR.....	.98
DIRECTIONAL DISTRIBUTION (UP/DOWN).....	55 / 45
LANE WIDTH (FT).....	12
USABLE SHOULDER WIDTH (AVG. WIDTH IN FT.)...	10
PERCENT NO PASSING ZONES.....	0

B) CORRECTION FACTORS

LEVEL TERRAIN

LOS	E T	E B	E R	f w	f d	f HV
A	2	1.8	2.2	1	.97	.97
B	2.2	2	2.5	1	.97	.96
C	2.2	2	2.5	1	.97	.96
D	2	1.6	1.6	1	.97	.98
E	2	1.6	1.6	1	.97	.98

C) LEVEL OF SERVICE RESULTS

INPUT VOLUME (vph): 537
 ACTUAL FLOW RATE: 548

LOS	SERVICE FLOW RATE	V/C
A	396	.15
B	707	.27
C	1126	.43
D	1701	.64
E	2658	1

LOS FOR GIVEN CONDITIONS: B

1985 HCM:TWO-LANE HIGHWAYS

FACILITY LOCATION.... S.H.66 (west of Co. Rd. 49)
 ANALYST..... L.LANG
 TIME OF ANALYSIS..... PM PEAK HOUR
 DATE OF ANALYSIS..... 05/17/93
 OTHER INFORMATION.... EXISTING TRAFFIC

A) ADJUSTMENT FACTORS

 PERCENTAGE OF TRUCKS..... 1
 PERCENTAGE OF BUSES..... 1
 PERCENTAGE OF RECREATIONAL VEHICLES..... 1
 DESIGN SPEED (MPH)..... 60
 PEAK HOUR FACTOR..... .98
 DIRECTIONAL DISTRIBUTION (UP/DOWN)..... 54 / 46
 LANE WIDTH (FT)..... 12
 USABLE SHOULDER WIDTH (AVG. WIDTH IN FT.)... 10
 PERCENT NO PASSING ZONES..... 0

B) CORRECTION FACTORS

 LEVEL TERRAIN

LOS	E T	E B	E R	f w	f d	f HV
A	2	1.8	2.2	1	.98	.97
B	2.2	2	2.5	1	.98	.96
C	2.2	2	2.5	1	.98	.96
D	2	1.6	1.6	1	.98	.98
E	2	1.6	1.6	1	.98	.98

C) LEVEL OF SERVICE RESULTS

 INPUT VOLUME (vph): 559
 ACTUAL FLOW RATE: 570

LOS	SERVICE FLOW RATE	V/C
A	398	.15
B	712	.27
C	1133	.43
D	1711	.64
E	2674	1

LOS FOR GIVEN CONDITIONS: B

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 55
 PEAK HOUR FACTOR..... .98
 AREA POPULATION..... 150000
 NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 47
 NAME OF THE ANALYST..... L.LANG
 DATE OF THE ANALYSIS (mm/dd/yy)..... 05-14-1993
 TIME PERIOD ANALYZED..... AM PEAK HOUR
 OTHER INFORMATION.... 1993 EXISTING TRAFFIC

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION
 MAJOR STREET DIRECTION: EAST/WEST
 CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	1	0	--	8
THRU	313	248	--	0
RIGHT	0	1	--	10

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	--	1

ADJUSTMENT FACTORS

Page-2

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	-----	---	---	-
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	---	---	---
SOUTHBOUND	0	0	0

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
SB	6.50	6.50	0.00	6.50
MAJOR LEFTS				
EB	5.50	5.50	0.00	5.50
MINOR LEFTS				
SB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; AM PEAK HOUR
 OTHER INFORMATION..... 1993 EXISTING TRAFFIC

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTEN-	ACTUAL		SHARED	RESERVE	LOS
		TIAL CAPACITY c (pcph) p	MOVEMENT CAPACITY c (pcph) M		CAPACITY c (pcph) SH	CAPACITY c = c - v R SH	
MINOR STREET							
SB LEFT	9	311	310	>	310	>	301 > B
				>	443	>	423 > A
RIGHT	11	674	674	>	674	>	663 > A
MAJOR STREET							
EB LEFT	1	836	836		836		835 A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; AM PEAK HOUR
 OTHER INFORMATION..... 1993 EXISTING TRAFFIC

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 55
 PEAK HOUR FACTOR..... .98
 AREA POPULATION..... 150000
 NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 47
 NAME OF THE ANALYST..... L.LANG
 DATE OF THE ANALYSIS (mm/dd/yy)..... 05-14-1993
 TIME PERIOD ANALYZED..... PM PEAK HOUR
 OTHER INFORMATION.... 1993 EXISTING TRAFFIC

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION
 MAJOR STREET DIRECTION: EAST/WEST
 CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	17	0	--	7
THRU	260	294	--	0
RIGHT	0	12	--	10

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	--	1

ADJUSTMENT FACTORS

Page-2

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	-----	---	---	-
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	---	---	---
SOUTHBOUND	0	0	0

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
SB	6.50	6.50	0.00	6.50
MAJOR LEFTS				
EB	5.50	5.50	0.00	5.50
MINOR LEFTS				
SB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION.... 1993 EXISTING TRAFFIC

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTEN-	ACTUAL	SHARED	RESERVE		LOS
		TIAL	MOVEMENT		CAPACITY		
		CAPACITY	CAPACITY	CAPACITY	c = c	- v	
		c (pcph)	c (pcph)	c (pcph)	R	SH	
		p	M	SH			
MINOR STREET							
SB LEFT	8	302	297	>	297	>	289 > C
				>	431	>	412 >A
RIGHT	11	630	630	>	630	>	619 > A
MAJOR STREET							
EB LEFT	19	779	779		779		760 A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION..... 1993 EXISTING TRAFFIC

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 55
 PEAK HOUR FACTOR..... .98
 AREA POPULATION..... 150000
 NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 49
 NAME OF THE ANALYST..... L.LANG
 DATE OF THE ANALYSIS (mm/dd/yy)..... 05-14-1993
 TIME PERIOD ANALYZED..... AM PEAK HOUR
 OTHER INFORMATION.... 1993 EXISTING TRAFFIC

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION
 MAJOR STREET DIRECTION: EAST/WEST
 CONTROL TYPE NORTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT		18	1	--
THRU	297	240	0	--
RIGHT	4		15	--

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	1	--

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	----	---	---	-

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	0	25	0
SOUTHBOUND	---	---	---

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
NB	6.50	6.50	0.00	6.50
MAJOR LEFTS				
WB	5.50	5.50	0.00	5.50
MINOR LEFTS				
NB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 49
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; AM PEAK HOUR
 OTHER INFORMATION.... 1993 EXISTING TRAFFIC

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTEN-	ACTUAL		SHARED	RESERVE	LOS
		TIAL	MOVEMENT		CAPACITY	CAPACITY	
		CAPACITY	CAPACITY		CAPACITY	CAPACITY	
		c (pcph)	c (pcph)		c (pcph)	c = c - v	
		p	M		SH	R SH	
MINOR STREET							
NB LEFT	1	314	310	>	310	>	308 > B
				>	593	>	572 >A
RIGHT	19	631	631	>	631	>	612 > A
MAJOR STREET							
WB LEFT	18	784	784		784		765 A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 49
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; AM PEAK HOUR
 OTHER INFORMATION.... 1993 EXISTING TRAFFIC

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 55
 PEAK HOUR FACTOR..... .98
 AREA POPULATION..... 150000
 NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 49
 NAME OF THE ANALYST..... L.LANG
 DATE OF THE ANALYSIS (mm/dd/yy)..... 05-14-1993
 TIME PERIOD ANALYZED..... PM PEAK HOUR
 OTHER INFORMATION.... 1993 EXISTING TRAFFIC

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION
 MAJOR STREET DIRECTION: EAST/WEST
 CONTROL TYPE NORTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT		3	3	--
THRU	258	301	0	--
RIGHT	3		19	--

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	1	--

ADJUSTMENT FACTORS

Page-2

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	----	---	---	-

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	0	25	0
SOUTHBOUND	---	---	---

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
NB	6.50	6.50	0.00	6.50
MAJOR LEFTS				
WB	5.50	5.50	0.00	5.50
MINOR LEFTS				
NB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 49
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION.... 1993 EXISTING TRAFFIC

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTEN-	ACTUAL		SHARED	RESERVE	LOS
		TIAL CAPACITY c (pcph) p	MOVEMENT CAPACITY c (pcph) M		CAPACITY c (pcph) SH	CAPACITY c = c - v R SH	
MINOR STREET							
NB LEFT	4	310	309	>	309	>	305 > B
				>	575	>	547 >A
RIGHT	24	665	665	>	665	>	641 > A
MAJOR STREET							
WB LEFT	3	824	824		824		821 A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 49
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION.... 1993 EXISTING TRAFFIC

APPENDIX B

**LOS CALCULATIONS
EXISTING VOLUMES - PEAK SEASON**

1985 HCM:TWO-LANE HIGHWAYS

FACILITY LOCATION.... S.H.66 (west of Co. Rd. 49)
 ANALYST..... L.LANG
 TIME OF ANALYSIS..... AM PEAK HOUR
 DATE OF ANALYSIS..... 05/17/93
 OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

A) ADJUSTMENT FACTORS

 PERCENTAGE OF TRUCKS..... 1
 PERCENTAGE OF BUSES..... 1
 PERCENTAGE OF RECREATIONAL VEHICLES..... 2
 DESIGN SPEED (MPH)..... 60
 PEAK HOUR FACTOR..... .98
 DIRECTIONAL DISTRIBUTION (UP/DOWN)..... 55 / 45
 LANE WIDTH (FT)..... 12
 USABLE SHOULDER WIDTH (AVG. WIDTH IN FT.)... 10
 PERCENT NO PASSING ZONES..... 0

B) CORRECTION FACTORS

 LEVEL TERRAIN

LOS	E T	E B	E R	f w	f d	f HV
A	2	1.8	2.2	1	.97	.96
B	2.2	2	2.5	1	.97	.95
C	2.2	2	2.5	1	.97	.95
D	2	1.6	1.6	1	.97	.97
E	2	1.6	1.6	1	.97	.97

C) LEVEL OF SERVICE RESULTS

 INPUT VOLUME (vph): 655
 ACTUAL FLOW RATE: 668

LOS	SERVICE FLOW RATE	V/C
A	391	.15
B	697	.27
C	1110	.43
D	1691	.64
E	2642	1

LOS FOR GIVEN CONDITIONS: B

1985 HCM:TWO-LANE HIGHWAYS

FACILITY LOCATION.... S.H.66 (west of Co. Rd. 49)
 ANALYST..... L.LANG
 TIME OF ANALYSIS..... PM PEAK HOUR
 DATE OF ANALYSIS..... 05/17/93
 OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

A) ADJUSTMENT FACTORS

 PERCENTAGE OF TRUCKS..... 1
 PERCENTAGE OF BUSES..... 1
 PERCENTAGE OF RECREATIONAL VEHICLES..... 2
 DESIGN SPEED (MPH)..... 60
 PEAK HOUR FACTOR..... .98
 DIRECTIONAL DISTRIBUTION (UP/DOWN)..... 46 / 54
 LANE WIDTH (FT)..... 12
 USABLE SHOULDER WIDTH (AVG. WIDTH IN FT.)... 10
 PERCENT NO PASSING ZONES..... 0

B) CORRECTION FACTORS

LEVEL TERRAIN

LOS	E T	E B	E R	f w	f d	f HV
A	2	1.8	2.2	1	.98	.96
B	2.2	2	2.5	1	.98	.95
C	2.2	2	2.5	1	.98	.95
D	2	1.6	1.6	1	.98	.97
E	2	1.6	1.6	1	.98	.97

C) LEVEL OF SERVICE RESULTS

INPUT VOLUME (vph): 676
 ACTUAL FLOW RATE: 690

LOS	SERVICE FLOW RATE	V/C
A	393	.15
B	701	.27
C	1117	.43
D	1701	.64
E	2658	1

LOS FOR GIVEN CONDITIONS: B

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 55

PEAK HOUR FACTOR..... .98

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... S.H. 66

NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 47

NAME OF THE ANALYST..... L.LANG

DATE OF THE ANALYSIS (mm/dd/yy)..... 05-14-1993

TIME PERIOD ANALYZED..... AM PEAK HOUR

OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	2	0	--	8
THRU	373	280	--	0
RIGHT	0	10	--	10

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	--	1

ADJUSTMENT FACTORS

Page-2

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	----	---	---	-
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	---	---	---
SOUTHBOUND	0	0	0

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
SB	6.50	6.50	0.00	6.50
MAJOR LEFTS				
EB	5.50	5.50	0.00	5.50
MINOR LEFTS				
SB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; AM PEAK HOUR
 OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTENTIAL CAPACITY c (pcph) p	ACTUAL MOVEMENT CAPACITY c (pcph) M	SHARED CAPACITY c (pcph) SH	RESERVE CAPACITY c = c - v R SH	LOS
MINOR STREET						
SB LEFT	9	262	261	> 261	> 253	C
				> 390	> 370	>B
RIGHT	11	643	643	> 643	> 632	A
MAJOR STREET						
EB LEFT	2	794	794	794	792	A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; AM PEAK HOUR
 OTHER INFORMATION..... EXISTING PEAK SEASON TRAFFIC

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 55
 PEAK HOUR FACTOR..... .98
 AREA POPULATION..... 150000
 NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 47
 NAME OF THE ANALYST..... L.LANG
 DATE OF THE ANALYSIS (mm/dd/yy)..... 05-14-1993
 TIME PERIOD ANALYZED..... PM PEAK HOUR
 OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION
 MAJOR STREET DIRECTION: EAST/WEST
 CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	17	0	--	16
THRU	312	349	--	0
RIGHT	0	12	--	11

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	--	1

ADJUSTMENT FACTORS

Page-2

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	----	---	---	-
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	---	---	---
SOUTHBOUND	0	0	0

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS SB	6.50	6.50	0.00	6.50
MAJOR LEFTS EB	5.50	5.50	0.00	5.50
MINOR LEFTS SB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTENTIAL CAPACITY c (pcph) p	ACTUAL MOVEMENT CAPACITY c (pcph) M		SHARED CAPACITY c (pcph) SH		RESERVE CAPACITY c = c - v R SH	LOS
MINOR STREET								
SB LEFT	18	251	247	>	247	>	229	> C
				>	323	>	293	> C
RIGHT	12	588	588	>	588	>	576	> A
MAJOR STREET								
EB LEFT	19	728	728		728		709	A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 55
 PEAK HOUR FACTOR..... .98
 AREA POPULATION..... 150000
 NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 49
 NAME OF THE ANALYST..... L.LANG
 DATE OF THE ANALYSIS (mm/dd/yy)..... 05-14-1993
 TIME PERIOD ANALYZED..... AM PEAK HOUR
 OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION
 MAJOR STREET DIRECTION: EAST/WEST
 CONTROL TYPE NORTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT		18	1	--
THRU	360	290	0	--
RIGHT	4		15	--

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	1	--

ADJUSTMENT FACTORS

Page-2

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	-----	---	---	-

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	0	25	0
SOUTHBOUND	---	---	---

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
NB	6.50	6.50	0.00	6.50
MAJOR LEFTS				
WB	5.50	5.50	0.00	5.50
MINOR LEFTS				
NB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 49
DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; AM PEAK HOUR
OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTEN-	ACTUAL	SHARED	RESERVE		LOS
		TIAL	MOVEMENT		CAPACITY		
		CAPACITY	CAPACITY	CAPACITY	c = c	- v	
		c (pcph)	c (pcph)	(pcph)	R	SH	
		p	M	SH			
MINOR STREET							
NB LEFT	1	257	253	>	253	>	252 > C
				>	539	>	519 >A
RIGHT	19	583	583	>	583	>	564 > A
MAJOR STREET							
WB LEFT	18	726	726		726		707 A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 49
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; AM PEAK HOUR
 OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 55
 PEAK HOUR FACTOR..... .98
 AREA POPULATION..... 150000
 NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 49
 NAME OF THE ANALYST..... L.LANG
 DATE OF THE ANALYSIS (mm/dd/yy)..... 05-14-1993
 TIME PERIOD ANALYZED..... PM PEAK HOUR
 OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION
 MAJOR STREET DIRECTION: EAST/WEST
 CONTROL TYPE NORTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
	----	----	----	----
LEFT		3	3	--
THRU	310	360	0	--
RIGHT	3		19	--

NUMBER OF LANES

	EB	WB	NB	SB
	----	----	----	----
LANES	1	1	1	--

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	----	---	---	-

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	0	25	0
SOUTHBOUND	---	---	---

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
NB	6.50	6.50	0.00	6.50
MAJOR LEFTS				
WB	5.50	5.50	0.00	5.50
MINOR LEFTS				
NB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 49
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTENTIAL CAPACITY c (pcph) p	ACTUAL MOVEMENT CAPACITY c (pcph) M	SHARED CAPACITY c (pcph) SH	RESERVE CAPACITY c = c - v R SH	LOS
MINOR STREET						
NB LEFT	4	255	255	>	255	> C
				> 520	> 491	> A
RIGHT	24	622	622	>	622	> 597 A
MAJOR STREET						
WB LEFT	3	773	773		773	769 A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 49
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION.... EXISTING PEAK SEASON TRAFFIC

APPENDIX C

**LOS CALCULATIONS
20-YEAR PROJECTED VOLUMES - PEAK SEASON**

1985 HCM:TWO-LANE HIGHWAYS

FACILITY LOCATION.... S.H.66 (west of Co. Rd. 49)
 ANALYST..... L.LANG
 TIME OF ANALYSIS..... AM PEAK HOUR
 DATE OF ANALYSIS..... 05/17/93
 OTHER INFORMATION.... YEAR 2015 PEAK SEASON TRAFFIC

A) ADJUSTMENT FACTORS

 PERCENTAGE OF TRUCKS..... 1
 PERCENTAGE OF BUSES..... 1
 PERCENTAGE OF RECREATIONAL VEHICLES..... 2
 DESIGN SPEED (MPH)..... 60
 PEAK HOUR FACTOR..... .98
 DIRECTIONAL DISTRIBUTION (UP/DOWN)..... 56 / 44
 LANE WIDTH (FT)..... 12
 USABLE SHOULDER WIDTH (AVG. WIDTH IN FT.)... 10
 PERCENT NO PASSING ZONES..... 0

B) CORRECTION FACTORS

 LEVEL TERRAIN

LOS	E T	E B	E R	f w	f d	f HV
A	2	1.8	2.2	1	.96	.96
B	2.2	2	2.5	1	.96	.95
C	2.2	2	2.5	1	.96	.95
D	2	1.6	1.6	1	.96	.97
E	2	1.6	1.6	1	.96	.97

C) LEVEL OF SERVICE RESULTS

 INPUT VOLUME (vph): 904
 ACTUAL FLOW RATE: 922

LOS	SERVICE FLOW RATE	V/C
A	389	.15
B	693	.27
C	1103	.43
D	1680	.64
E	2626	1

LOS FOR GIVEN CONDITIONS: C

1985 HCM:TWO-LANE HIGHWAYS

FACILITY LOCATION.... S.H.66 (west of Co. Rd. 49)
 ANALYST..... L.LANG
 TIME OF ANALYSIS..... PM PEAK HOUR
 DATE OF ANALYSIS..... 05/17/93
 OTHER INFORMATION.... YEAR 2015 PEAK SEASON TRAFFIC

A) ADJUSTMENT FACTORS

 PERCENTAGE OF TRUCKS..... 1
 PERCENTAGE OF BUSES..... 1
 PERCENTAGE OF RECREATIONAL VEHICLES..... 2
 DESIGN SPEED (MPH)..... 60
 PEAK HOUR FACTOR..... .98
 DIRECTIONAL DISTRIBUTION (UP/DOWN)..... 46 / 54
 LANE WIDTH (FT)..... 12
 USABLE SHOULDER WIDTH (AVG. WIDTH IN FT.)... 10
 PERCENT NO PASSING ZONES..... 0

B) CORRECTION FACTORS

 LEVEL TERRAIN

LOS	E T	E B	E R	f w	f d	f HV
A	2	1.8	2.2	1	.98	.96
B	2.2	2	2.5	1	.98	.95
C	2.2	2	2.5	1	.98	.95
D	2	1.6	1.6	1	.98	.97
E	2	1.6	1.6	1	.98	.97

C) LEVEL OF SERVICE RESULTS

INPUT VOLUME (vph): 933
 ACTUAL FLOW RATE: 952

LOS	SERVICE FLOW RATE	V/C
A	393	.15
B	701	.27
C	1117	.43
D	1701	.64
E	2658	1

LOS FOR GIVEN CONDITIONS: C

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 55
 PEAK HOUR FACTOR..... .98
 AREA POPULATION..... 150000
 NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 47
 NAME OF THE ANALYST..... L.LANG
 DATE OF THE ANALYSIS (mm/dd/yy)..... 05-14-1993
 TIME PERIOD ANALYZED..... AM PEAK HOUR
 OTHER INFORMATION.... YEAR 2015 PEAK SEASON

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION
 MAJOR STREET DIRECTION: EAST/WEST
 CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	2	0	--	8
THRU	513	390	--	0
RIGHT	0	10	--	10

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	--	1

ADJUSTMENT FACTORS

Page-2

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	----	---	---	-
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	---	---	---
SOUTHBOUND	0	0	0

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
SB	6.50	6.50	0.00	6.50
MAJOR LEFTS				
EB	5.50	5.50	0.00	5.50
MINOR LEFTS				
SB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; AM PEAK HOUR
 OTHER INFORMATION.... YEAR 2015 PEAK SEASON

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTENTIAL CAPACITY c (pcph) p	ACTUAL MOVEMENT CAPACITY c (pcph) M	SHARED CAPACITY c (pcph) SH	RESERVE CAPACITY c = c - v R SH	LOS
MINOR STREET						
SB LEFT	9	160	160	> 160	> 151	D
				> 265	> 244	>C
RIGHT	11	558	558	> 558	> 547	A
MAJOR STREET						
EB LEFT	2	694	694	694	692	A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; AM PEAK HOUR
 OTHER INFORMATION.... YEAR 2015 PEAK SEASON

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 55
 PEAK HOUR FACTOR..... .98
 AREA POPULATION..... 150000
 NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 47
 NAME OF THE ANALYST..... L.LANG
 DATE OF THE ANALYSIS (mm/dd/yy)..... 05-14-1993
 TIME PERIOD ANALYZED..... PM PEAK HOUR
 OTHER INFORMATION.... YEAR 2015 PEAK SEASON

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION
 MAJOR STREET DIRECTION: EAST/WEST
 CONTROL TYPE SOUTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	17	0	--	16
THRU	432	489	--	0
RIGHT	0	12	--	11

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	--	1

ADJUSTMENT FACTORS

Page-2

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	----	---	---	-
SOUTHBOUND	0.00	90	20	N

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	---	---	---
SOUTHBOUND	0	0	0

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
SB	6.50	6.50	0.00	6.50
MAJOR LEFTS				
EB	5.50	5.50	0.00	5.50
MINOR LEFTS				
SB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION..... YEAR 2015 PEAK SEASON

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTENTIAL CAPACITY c (pcph) p	ACTUAL MOVEMENT CAPACITY c (pcph) M	SHARED CAPACITY c (pcph) SH	RESERVE CAPACITY c = c - v R SH	LOS
MINOR STREET						
SB LEFT	18	148	145	>	145	> D
RIGHT	12	489	489	>	203 489	> D > A
MAJOR STREET						
EB LEFT	19	619	619		619	600 A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 47
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION.... YEAR 2015 PEAK SEASON

IDENTIFYING INFORMATION

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 PEAK HOUR FACTOR..... .98
 AREA POPULATION..... 150000
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 NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 49
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 DATE OF THE ANALYSIS (mm/dd/yy)..... 05-14-1993
 TIME PERIOD ANALYZED..... AM PEAK HOUR
 OTHER INFORMATION.... YEAR 2015 PEAK SEASON

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION
 MAJOR STREET DIRECTION: EAST/WEST
 CONTROL TYPE NORTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT		18	1	--
THRU	500	400	0	--
RIGHT	4		15	--

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	1	--

ADJUSTMENT FACTORS

Page-2

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	-----	---	---	-

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	0	25	0
SOUTHBOUND	---	---	---

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
NB	6.50	6.50	0.00	6.50
MAJOR LEFTS				
WB	5.50	5.50	0.00	5.50
MINOR LEFTS				
NB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 49
DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; AM PEAK HOUR
OTHER INFORMATION.... YEAR 2015 PEAK SEASON

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTENTIAL CAPACITY c (pcph) p	ACTUAL MOVEMENT CAPACITY c (pcph) M		SHARED CAPACITY c (pcph) SH		RESERVE CAPACITY c = c - v R SH	LOS
MINOR STREET								
NB LEFT	1	156	154	>	154	>	152	> D
				>	427	>	406	>A
RIGHT	19	484	484	>	484	>	465	> A
MAJOR STREET								
WB LEFT	18	617	617		617		599	A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
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IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 55
 PEAK HOUR FACTOR..... .98
 AREA POPULATION..... 150000
 NAME OF THE EAST/WEST STREET..... S.H. 66
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 NAME OF THE ANALYST..... L.LANG
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 TIME PERIOD ANALYZED..... PM PEAK HOUR
 OTHER INFORMATION.... YEAR 2015 PEAK SEASON

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION
 MAJOR STREET DIRECTION: EAST/WEST
 CONTROL TYPE NORTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT		3	3	--
THRU	430	500	0	--
RIGHT	3		19	--

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	1	1	--

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	----	---	---	-

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	0	25	0
SOUTHBOUND	---	---	---

CRITICAL GAPS

	TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS				
NB	6.50	6.50	0.00	6.50
MAJOR LEFTS				
WB	5.50	5.50	0.00	5.50
MINOR LEFTS				
NB	8.00	8.00	0.00	8.00

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET..... COUNTY RD. 49
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION.... YEAR 2015 PEAK SEASON

CAPACITY AND LEVEL-OF-SERVICE

MOVEMENT	FLOW-RATE v (pcph)	POTENTIAL CAPACITY c (pcph) p	ACTUAL MOVEMENT CAPACITY c (pcph) M		SHARED CAPACITY c (pcph) SH	RESERVE CAPACITY c = c - v R SH	LOS
MINOR STREET							
NB LEFT	4	151	151	>	151	>	147 > D
				>	396	>	368 > B
RIGHT	24	533	533	>	533	>	509 > A
MAJOR STREET							
WB LEFT	3	670	670		670		667 A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... S.H. 66
 NAME OF THE NORTH/SOUTH STREET.... COUNTY RD. 49
 DATE AND TIME OF THE ANALYSIS..... 05-14-1993 ; PM PEAK HOUR
 OTHER INFORMATION..... YEAR 2015 PEAK SEASON